=> fil reg; d que stat; fil ca,caplus; s 15 or 15/d FILE 'REGISTRY' ENTERED AT 11:13:41 ON 17 JUN 1997 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 1997 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 15 JUNE 97 HIGHEST RN 189933-40-2 DICTIONARY FILE UPDATES: 16 JUNE 97 HIGHEST RN 189933-39-9

TSCA INFORMATION NOW CURRENT THROUGH DECEMBER 1996

Please note that search-term pricing does apply when conducting SmartSELECT searches.

L1 STR

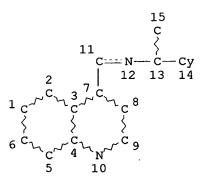
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I

NUMBER OF NODES IS 1

STEREO ATTRIBUTES: NONE

L2 194 SEA FILE=REGISTRY SSS FUL L1 L4 STR



NODE ATTRIBUTES:
NSPEC IS RC AT 15
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I

NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L5 120 SEA FILE=REGISTRY SUB=L2 SSS FUL L4

100.0% PROCESSED 192 ITERATIONS

120 ANSWERS

SEARCH TIME: 00.00.03

FILE 'CA' ENTERED AT 11:13:42 ON 17 JUN 1997 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 1997 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAPLUS' ENTERED AT 11:13:42 ON 17 JUN 1997 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 1997 AMERICAN CHEMICAL SOCIETY (ACS)

L6 10 FILE CA L7 11 FILE CAPLUS

TOTAL FOR ALL FILES

L8 21 L5 OR L5/D

=> dup rem 18; d 1-11 .bevstr; sel hit 17 1-11 rn PROCESSING COMPLETED FOR L8 L9 11 DUP REM L8 (10 DUPLICATES REMOVED)

- L9 ANSWER 1 OF 11 CAPLUS COPYRIGHT 1997 ACS
- AN 1997:320920 CAPLUS
- TI Discovery of a Novel Class of Selective Non-Peptide Antagonists for the Human Neurokinin-3 Receptor. 1. Identification of the 4-Quinolinecarboxamide Framework
- AU Giardina, Giuseppe A. M.; Sarau, Henry M.; Farina, Carlo; Medhurst, Andrew D.; Grugni, Mario; Raveglia, Luca F.; Schmidt, Dulcie B.; Rigolio, Roberto; Luttmann, Mark; Vecchietti, Vittorio; Hay, Douglas W. P.
- CS Department of Chemistry, SmithKline Beecham S.p.A., Baranzate, 20021, Italy
- SO J. Med. Chem. (1997), 40(12), 1794-1807 CODEN: JMCMAR; ISSN: 0022-2623
- DT Journal
- LA English
- AB A novel class of potent and selective non-peptide neurokinin-3 (NK-3) receptor antagonists, featuring the 4-quinolinecarboxamide framework, was designed based upon chem. diverse NK-1 receptor antagonists. The novel compds., prompted by chem. modifications of the prototype, were characterized by binding anal. using a membrane prepn. of chinese hamster ovary (CHO) cells expressing the human neurokinin-3 receptors (hNK-3-CHO), and clear structure-activity relationships (SARs) were established. From SARs, (R)-N-[.alpha.-(methoxycarbonyl)benzyl]-2-phenylquinoline-4-carboxamide (I, SB 218795, hNK-3-CHO binding Ki = 13 nM) emerged as one of the most potent compds. of this novel class. Selectivity studies vs. the other neurokinin receptors (hNK-2-CHO and hNK-1-CHO) Searcher: Shears 308-4994

revealed that 65 is about 90-fold selective for hNK-3 vs. hNK-2

IT

L9

AN TI

IN

PA SO

PΙ

DS

ΑI

DT

LA

os

AB

```
receptors (hNK-2-CHO binding Ki = 1221 nM) and over 7000-fold
     selective vs. hNK-1 receptors (hNK-1-CHO binding Ki = >100 .mu.M).
     In vitro functional studies in rabbit isolated iris sphincter muscle
     prepn. demonstrated that I a competitive antagonist of the
     contractile response induced by the potent and selective NK-3
     receptor agonist senktide with a Kb = 43 nM. Overall, the data
     indicate that I is a potent and selective hNK-3 receptor antagonist
     and a useful lead for further chem. optimization.
     RN LIST MAY NOT BE COMPLETE: 67-64-1
                                             70-11-1
                                                       75-05-8
                                                                 83-93-2
                                    94-02-0
                                              98-86-2
                                                        99-02-5
                                                                  99-91-2
     88-15-3
               91-56-5
                         93-98-1
     99-93-4
               100-06-1
                          102-04-5
                                      103-79-7
                                                 118-93-4
                                                            122-00-9
                                       529-34-0
     132-60-5
                445-27-2
                           451-40-1
                                                  577-16-2
                                                             579-74-8
                                                                1192-62-7
                826-73-3
                           1072-82-8
                                        1072-83-9
                                                    1122-54-9
     823-76-7
     1468-83-3
                 1646-26-0
                             1647-89-8
                                          1721-96-6
                                                      2142-68-9
     3446-58-0
                 4364-02-7
                             4637-24-5
                                          4903-36-0
                                                      5466-31-9
                             13226-98-7
                                           14228-23-0
     6952-34-7
                 7672-01-7
                                                        20146-23-0
     20146-25-2
                  20389-05-3
                               20389-09-7
                                             20389-10-0
                                                          20389-11-1
                                                          52351-75-4
                                             31792-47-9
     20662-89-9
                  21908-20-3
                               24295-03-2
     55240-51-2
                  73178-52-6
                               92566-43-3
                                             92566-45-5
                                                          92566-89-7
     111588-91-1
                   174635-51-9
                                 174635-52-0
                                 174635-56-4
     174635-53-1
                   174635-54-2
                   174635-59-7
                                 174635-60-0
     174635-58-6
     174635-61-1
                   174635-67-7
                                 174635-71-3
                   174635-91-7
                                 174635-97-3
     174635-73-5
                   174635-99-5
     174635-98-4
                                 174636-00-1
     174636-01-2
                   174636-04-5
                                 174636-06-7
     174636-07-8
                   174636-09-0
                                 174636-13-6
     174636-23-8
                                 174636-25-0
                   174636-24-9
     174636-40-9
                                                174636-84-1
                   174636-63-6
                                 174636-64-7
                                                              177360-23-5
     174636-85-2
                   174636-88-5
                                 174636-91-0
                                                177360-18-8
                                                              177360-31-5
     177360-24-6
                   177360-26-8
                                 177360-27-9
                                                177360-30-4
                                                              189815-82-5
     177360-32-6
                   177606-27-8
                                 181048-49-7
                                                189815-81-4
     189815-86-9
                   189815-87-0
                                 189815-88-1
                                                189815-92-7
     189815-93-8
                   189815-94-9
                                 189815-95-0
                                                189815-99-4
                                                              189816-00-0
     189815-96-1
                   189815-97-2
                                 189815-98-3
     189816-01-1
                   189816-02-2
                                 189816-03-3
                                                189816-04-4
                                                              189816-05-5
     189816-06-6
     ANSWER 2 OF 11 CA COPYRIGHT 1997 ACS
                                                        DUPLICATE 1
     126:89156 CA ✓
     Preparation of chiral isothioyanates as derivatizing agents
     Lindner, Wolfgang; Kleidernigg, Oliver Paul
     Lindner, Wolfgang, Austria; Kleidernigg, Oliver Paul
     PCT Int. Appl., 42 pp.
     CODEN: PIXXD2
     WO 9637465 Al 961128
         AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
         ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
         LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
         SG, SI
     RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB,
         GR, IE, IT, LU, MC, NL, PT, SE
     WO 96-EP2258 960524
PRAI EP 95-108125 950526
     Patent
     English
     MARPAT 126:89156
     R1NHCHR2CHR3NCS [R1 = COR4, CO2R5, SO2R6; R2,R3 = aliph. or arom.
     group; R2R3 = atoms to complete carbocyclic or heterocyclic ring; R4
                               Searcher: Shears 308-4994
```

= aliph. or (hetero)arom. group, aralkyl; R5 = CMe3, (nitro)benzyl, fluorenylmethyl; R6 = (hetero)aryl] were prepd. Thus, (R,R)-1,2-diaminocyclohexane was cyclocondensed with CS2 and the product amidated by 3,5-(O2N)2C6H3COCl to give (R,R)-N-(2-isothiocyanatocyclohexyl)-3,5-dinitrobenzamide. The latter was used to prep. diastereomeric derivs. of (R)-, and (S)-propranolol. Data for chromatog. sepns. of, e.g., amino acids, etc. were given.

IT 185508-91-2P 185508-92-3P

RL: NUU (Nonbiological use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses) (prepn. of chiral isothiocyanates as derivatizing agents)

L9 ANSWER 3 OF 11 CA COPYRIGHT 1997 ACS DUPLICATE 2

AN 125:25636 CA

- TI 2-Phenyl-4-quinolinecarboxamides: A Novel Class of Potent and Selective Non-Peptide Competitive Antagonists for the Human Neurokinin-3 Receptor
- AU Giardina, Giuseppe A. M.; Sarau, Henry M.; Farina, Carlo; Medhurst, Andrew D.; Grugni, Mario; Foley, James J.; Raveglia, Luca F.; Schmidt, Dulcie B.; Rigolio, Roberto; et al.
- CS Department of Chemistry, SmithKline Beecham S.p.A., Baranzate, 20021, Italy
- SO J. Med. Chem. (1996), 39(12), 2281-2284 CODEN: JMCMAR; ISSN: 0022-2623
- DT Journal
- LA English
- OS CJACS-IMAGE; CJACS
- A novel class of potent and selective, non-peptide NK-3 receptor AB antagonists, based on the 2-phenylquinoline framework, has been identified and characterized by binding anal. using membrane prepn. of CHO cells expressing the human neurokinin receptors (hNKs-CHO). Functional activity was detd. by inhibition of senktide-induced contraction of the rabbit isolated iris sphincter muscle prepn. extensive structure-activity study led to the identification of (S)-(-)-N-(.alpha.-ethylbenzyl)-3-hydroxy-2-phenylquinoline-4carboxamide (SB 223412) as the most potent (Ki = 1.0 nm in hNK-3-CHO binding; Kb = 5.4 nM for antagonism of senktide-induced contraction in rabbit iris sphincter muscle) and selective (hNK-2/hNK-3 Ki ratio of 144 and hNK-1/hNK-3 Ki ratio > 100,000) hNK-3 receptor antagonist of this class. In addn., NKB-induced Ca2+ mobilization studies in hNK-3-HEK 293 cells indicated that SB 223412 is a reversible, competitive antagonist. Compds. from this novel class will be extremely useful in the functional characterization of hNK-3 receptors and elucidation of potential therapeutic indications for selective hNK-3 receptor antagonists.
- IT 174635-51-9P 174635-52-0P 174635-53-1P 174635-69-9P 174636-20-5P 174636-32-9P, SB 223412

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. and structure-activity of human neurokinin 3 receptor antagonists phenylquinolinecarboxamides)

- L9 ANSWER 4 OF 11 CA COPYRIGHT 1997 ACS
- DUPLICATE 3

- AN 124:232269 CA
- TI Quinoline derivatives as tachykinin NK3 receptor antagonists
- IN Farina, Carlo; Giardina, Giuseppe Arnaldo Mari; Grugni, Mario; Raveglia, Luca Francesco
- PA Smithkline Beecham Farmaceutici S.P.A., Italy
- SO PCT Int. Appl., 95 pp.

```
CODEN: PIXXD2
PΙ
     WO 9532948 A1
                   951207
         AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
DS
         GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,
         MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
         TM, TT
     RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,
         IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
     WO 95-EP2000 950523
ΑI
PRAI IT 94-MI1099 940527
     IT 95-MI494 950314
DΤ
     Patent
LA
     English
os
    MARPAT 124:232269
GI
```

$$R^2$$
 R^2
 R^2
 R^2
 R^2
 R^3
 R^4
 R^4
 R^4
 R^5
 R^5
 R^6
 R^6

NK3 receptor antagonists I [Ar = (un) substituted Ph, naphthyl, AΒ cycloalkadienyl, heteroaryl; R = (un)substituted alkyl, cycloalkyl, (un) substituted Ph, phenylalkyl, or heteroaryl, CO2H and derivs., etc.; R1, R2 = H, alkyl; or R1R2 = (CH2)3-5; or RR1 = (CH2)2-5; R3, R4 = H, alkyl, alkenyl, aryl, alkoxy, OH, halo, NO2, amino, etc.; R5 = alkyl, cycloalkyl, (un)substituted (hetero)aryl; X = O, S, N(CN)] are useful in treating pulmonary, CNS, and neurodegenerative disorders, etc. Approx. 115 compds. were prepd. For example, amidation of 3-methyl-2-phenylquinoline-4-carbonyl chloride with (R)-.alpha.-ethylbenzylamine gave title compd. II in 58% yield. II had IC50 of 5.6 nM for displacement of [3H]-senktide from guinea-pig cortical NK3 receptors. Antagonist activity of I was shown by inhibition of senktide-induced contraction of guinea-pig ileum. IT174635-48-4P 174635-49-5P 174635-50-8P 174635-51-9P 174635-52-0P 174635-53-1P 174635-54-2P 174635-55-3P 174635-56-4P 174635-57-5P 174635-58-6P 174635-59-7P 174635-60-0P 174635-61-1P 174635-62-2P

174635-54-2P 174635-55-3P 174635-56-4P
174635-57-5P 174635-58-6P 174635-59-7P
174635-60-0P 174635-61-1P 174635-62-2P
174635-63-3P 174635-68-8P 174635-65-5P
174635-66-6P 174635-68-8P 174635-72-4P
174635-70-2P 174635-71-3P 174635-72-4P
174635-76-8P 174635-77-9P 174635-78-0P
174635-79-1P 174635-80-4P 174635-81-5P
174635-82-6P 174635-83-7P 174635-84-8P
174635-88-2P 174635-89-3P 174635-90-6P
174635-91-7P 174635-92-8P 174635-93-9P
174635-94-0P 174635-95-1P 174635-96-2P
Searcher : Shears 308-4994

```
174635-97-3P 174635-98-4P 174636-00-1P
174636-01-2P 174636-03-4P 174636-04-5P
174636-05-6P 174636-06-7P 174636-07-8P
174636-09-0P 174636-10-3P 174636-11-4P
174636-12-5P 174636-13-6P 174636-14-7P
174636-15-8P 174636-16-9P 174636-17-0P
174636-18-1P 174636-19-2P 174636-20-5P
174636-21-6P 174636-22-7P 174636-23-8P
174636-24-9P 174636-25-0P 174636-26-1P
174636-27-2P 174636-28-3P 174636-29-4P
174636-30-7P 174636-31-8P 174636-32-9P
174636-33-0P 174636-34-1P 174636-35-2P
174636-36-3P 174636-37-4P 174636-38-5P
174636-39-6P 174636-40-9P 174636-41-0P
174636-42-1P 174636-43-2P 174636-44-3P
174636-45-4P 174636-46-5P 174636-47-6P
174636-48-7P 174636-49-8P 174636-50-1P
174636-51-2P 174636-52-3P 174636-53-4P
174636-54-5P 174636-55-6P 174636-56-7P
174636-57-8P 174636-58-9P 174636-59-0P
174636-60-3P 174636-61-4P 174636-62-5P
RL: BAC (Biological activity or effector, except adverse); SPN
(Synthetic preparation); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); USES (Uses)
   (prepn. of quinolinecarboxamide derivs. as tachykinin NK3
   receptor antagonists)
                                                  DUPLICATE 4
ANSWER 5 OF 11 CA COPYRIGHT 1997 ACS
93:186338 CA
Ampicillin derivatives
Mitsubishi Yuka Yakuhin Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
```

JP 55055194 800422 Showa

JP 78-127324 781018

L9

ΑN

TI

PA so

PΙ

ΑI DT

LΑ

GT

Patent

Japanese

Fifteen title derivs. I (R = heterocyclic, heterocyclic-substituted AB methyl) were prepd. and the min. inhibition concns. treated against Ps. aeruginosa, St. aureus, B. substilis, E. coli, Kl. pneumoniae, and Pr. vulgaris. Thus, 618 mg DCC was added to a mixt. of 648 4-carbamoyl-2-quinolinecarboxylic acid and 345 mg N-hydroxysuccinimide in DMF with ice cooling, the mixt. stirred 10 h with ice cooling, a mixt. of 1.2 g ampicillin-3H2O and 0.42 mL Et3N in CH2Cl2-DMF added, and the mixt. stirred 3 h at room temp. to give, after treating with K 2-ethylhexanoate, 1.32 d-I (R = 4-carbamoyl-2-quinolyl) K salt. ΙT

75204-90-9P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. and bactericidal activity of)

DUPLICATE 5 ANSWER 6 OF 11 CA COPYRIGHT 1997 ACS L9 90:38949 CA AN ΤI Cephalosporins with .alpha.-acylaminoacetic acid side chains Kocsis, Karoly; Peter, Heinrich; Bickel, Hans IN Ciba-Geigy A.-G., Switz. PA Swiss, 11 pp. so CODEN: SWXXAS ΡI CH 606006 781013 ΑI CH 74-6494 740513 DΤ Patent LA German

The cephalosporins I [R = 6-membered ring contg. 1-3 N atoms and an oxo group (optionally substituted or condensed with other rings); R1 = (substituted) Ph, thienyl, furyl, cyclohexadienyl; R2 = H, ester group; R3 = H, alkoxy, substituted Me] were prepd. for use as bactericides, e.g., at 8-100 mg/kg s.c. in mice against Staphylococcus aureus. Thus, D-(-)-(1,6-dihydro-6-oxo-3-pyridazinylcarbonylamino)phenylacetic acid reacted with ClCO2Et, N-methylmorpholine, and 7.beta.-aminocephalosporanic acid in THF to give D-7.beta.-I (R = 1,6-dihydro-6-oxo-3-pyridazinyl, R1 = Ph, R2 = H, R3 = AcOCH2).

IT 59133-55-0P

- L9 ANSWER 7 OF 11 CA COPYRIGHT 1997 ACS DUPLICATE 6
- AN 90:38951 CA
- TI Cephalosporins with .alpha.-acylaminoacetic acid side chains
- IN Kocsis, Karoly; Peter, Heinrich; Bickel, Hans
- PA Ciba-Geigy A.-G., Switz.
- SO Swiss, 11 pp.
 - CODEN: SWXXAS
- PI CH 606001 781013
- AI CH 74-6494 740513
- DT Patent
- LA German

GI

GT

RCONHCHR¹CONH S R³ CO₂R² I

AB The cephemcarboxylic acids I [R = 6-membered ring contg. 1-3 N atoms and an oxo group, optionally substituted or condensed with other rings; R1 = (substituted) Ph, thienyl, furyl, cyclohexadienyl; R2 = H, physiol. cleavable ester group; R3 = H, (substituted) Me, lower alkoxyl were prepd. for use as bactericides, e.g., at 8-100 mg/kg s.c. against Staphylococcus aureus in mice. Thus, cephaloglycin reacted with 6-hydroxy-3-pyridinecarbonyl chloride in CH2Cl2 to give I (R = 6-hydroxy-3-pyridyl, R1 = Ph, R2 = H, R3 = CH2OAc).

IT 59133-55-0P

- L9 ANSWER 8 OF 11 CA COPYRIGHT 1997 ACS DUPLICATE 7
- AN 84:135637 CA
- TI Penicillins
- IN Tobiki, Hisao; Shimaji, Kozo; Okano, Shigeru; Komatsu, Toshiaki; Katsura, Toyozo; Taira, Yasushi; Eda, Yasuko
- PA Sumitomo Chemical Co., Ltd., Japan
- SO Japan., 11 pp. CODEN: JAXXAD
 - JP 50023036 B4 750805 Showa
- AI JP 70-124363 701229
- DT Patent

PΙ

- LA Japanese
- GI For diagram(s), see printed CA Issue.
- Acids ROH I (Z = O, S; R1 = alkyl, cycloalkylalkyl, alkenyl, AΒ aralkyl, OH, alkoxy, aralkyloxy; R2 = H, alkyl; A = benzo, naphtho, pyrido) were treated with 6-aminopenicillanic acid (III) or its derivs. to give II. II are bactericides not only against gram-pos. and -neg. bacteria but also against Pseudomonas aeruginosa (min. inhibitory concn. 3.13-50 .mu.g/ml). Thus, 2 g 1-hydroxy-6,7methylenedioxy-4-quinolone-3-carboxylic acid in CH2Cl2 was treated with Et3N, 1.8 g ClCO2Et, and 1.65 g D(-)-.alpha.-phenylglycine Et ester-HCl to give 1.8 g D(-)-.alpha.-(1-hydroxy-6,7-methylenedioxy-4quinolone-3-carboxamido)phenylacetic acid, which (1 g) in CH2Cl2 was treated with Et3N, ClCO2Et and 0.83 g III Et3N salt to give 1.3 g D(-)-II (Z = O, R1 = OH, R2 = H, A = 6,7-methylenedioxybenzo). Among 25 more II prepd. were (Z, R1, R2, A given): O, Et, H, 6-methoxybenzo; O, Me, H, X; O, Et, H, 1,2-naphtho; O, OEt, H, 6,7-methylenedioxybenzo.

IT 58865-82-0P

- L9 ANSWER 9 OF 11 CA COPYRIGHT 1997 ACS
- AN 84:164802 CA
- TI Cephalosporins with .alpha.-acylaminoacetic acid side chain
- IN Kocsis, Karoly; Peter, Heinrich; Bickel, Hans
- PA Ciba-Geigy A.-G., Switz.

Searcher: Shears 308-4994

DUPLICATE 8

SO Ger. Offen., 80 pp.
CODEN: GWXXBX
PI DE 2520561 751127
PRAI CH 74-6494 740513
DT Patent
LA German
GI

RCONHCHPhCONH S R1

AB Of the cephalosporins I (R = N heterocyclyl, R1 = CH2OAc, OMe, heterocyclic thiomethyl pyridiniomethyl) were prepd. by acetylating cephaloglycines and substituting on acetoxymethyl group. Thus, I (F = 2-hydroxy-5-pyridyl, R1 = OAc) was obtained by treating cephaloglycine with 2-hydroxy-5-pyridinecarbonyl chloride.

IT 59133-55-0P

Ι

L9 ANSWER 10 OF 11 CA COPYRIGHT 1997 ACS DUPLICATE 9

AN 70:47439 CA

TI .alpha.-Amidobenzyl- and amido(2-thienyl)methylpenicillins

IN Long, Anthony Alfred W.; Nayler, John H. C.

PA Beecham Group Ltd.

SO Brit., 6 pp.

CODEN: BRXXAA

PI GB 1130445 681016

AI GB 660426

DT Patent

LA English

GI For diagram(s), see printed CA Issue.

The 6-aminopenicillanic acid derivs. prepd. had the structure I, AB where R is a Ph or thienyl group, R1 is a heterocyclic group, and n is 0 or 1. The compds. were useful as antibacterial agents, as nutritional supplements in animal food, and in the treatment of infectious diseases caused by gram-pos. and gram-neg. bacteria. Thus, a suspension of 12.8 g. D-.alpha.-aminobenzylpenicillin (II) trihydrate in 80 ml. H2O was adjusted to pH 9.2 with 5N aq. NaOH and treated with a soln. of 4.6 g. 5-methyl-3-isoxazolecarbonyl chloride in 100 ml. iso-BuCOMe (III). After stirring for 2 hrs. at room temp., the mixt. was filtered through Dicalite and the layers were sepd. The org. phase was washed with satd. brine and treated with 16 ml. 2N Na 2-ethylhexanoate in III to give 13 g. Na salt of D-.alpha.-(5-methyl-3-iso-xazolecarboxamido)benzylpenicillin which crystd. on trituration with ether. The sodium salts of D-.alpha.-(5-methyl-4-isoxazolecar-boxamido)benzylpenicillin, D-.alpha.-(2-furancarboxamido)benzylpenicillin, D-.alpha.-(3thiophenecarboxamido)benzylpenicillin, D-.alpha.-(2thiophenecarboxamido) benzylpenicillin, D-.alpha.-(2thiopheneacetamido)benzylpenicillin, D-.alpha.-(3thiopheneacetamido)benzylpenicillin, D-.alpha.-(3-ethoxy-4quinolinecarboxamido)benzylpenicillin, D-.alpha.-(8-methoxy-2-Searcher: Shears 308-4994

```
quinolinecarboxamido) benzylpenicillin, D-.alpha.-(2-
    pyridinecarboxamido) benzylpenicillin, D-.alpha.-
     (phthalimidoacetamido)-benzylpenicillin, D-.alpha.-(2,6-dioxo-4-
     piperidineacitamido)benzylpenicillin, D-.alpha.-(2-oxo-2H-pyran-5-
     carboxamido)benzylpenicillin, D-.alpha.-(5-methyl-3-phenyl-4-
     isoxazolecarboxamido)benzylpenicillin, D-.alpha.-(3-methyl-5-phenyl-
     4-isoxazolecarboxamido)benzylpenicillin, D-.alpha.-(5-bromo-2-
     (methylthio) -4-pyrimidinecarboxamido) benzylpenicillin,
     D-.alpha.-(2-furoylamino)-2-thienylmethylpenicillin,
     D-.alpha.-nicotinamidobenzylpenicillin, D-.alpha.-(2-
     thiopheneacetamido) -2-thi-enylmethylpenicillin, and
     D-.alpha.-(2-furanacetamido)benzylpenicillin were similarly prepd.
TΨ
     21611-82-5P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
    ANSWER 11 OF 11 CA COPYRIGHT 1997 ACS
                                                       DUPLICATE 10
L9
AN
     74:87972 CA
    Antibacterial acylated benzylpenicillin and thienylmethylpenicillin
ΤI
    derivatives
PA
    Beecham Group Ltd.
     Fr. M., 4 pp.
so
     CODEN: FMXXAJ
PΙ
     FR 6212 680902
PRAI GB 660426
DT
    Patent
LΑ
     French
GΙ
     For diagram(s), see printed CA Issue.
     [.alpha.-(Amino)arylacetamido]penicillin deriv. (I), where Ar is Ph
AB
     or 2-thienyl, are treated with Ar1(CH2)nCOCl (Ar1 = heteroaryl) to
     give penicillin diamide derivs. (II). II (n = 0 or 1 and Ar1 is
     furyl, thienyl, phthalimido, or a substituted quinolyl, piperidyl,
     oxopyranyl, or isoxazolyl group) are prepd.
IT
     21611-82-5P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
E1 THROUGH E120 ASSIGNED
=> fil reg
FILE 'REGISTRY' ENTERED AT 11:14:19 ON 17 JUN 1997
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 1997 American Chemical Society (ACS)
STRUCTURE FILE UPDATES: 15 JUNE 97 HIGHEST RN 189933-40-2
DICTIONARY FILE UPDATES: 16 JUNE 97 HIGHEST RN 189933-39-9
TSCA INFORMATION NOW CURRENT THROUGH DECEMBER 1996
  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.
=> d que
L10
            120 SEA FILE=REGISTRY ABB=ON PLU=ON (174635-51-9/BI OR 1746
                35-52-0/BI OR 174635-53-1/BI OR 59133-55-0/BI OR 174635-5
                4-2/BI OR 174635-56-4/BI OR 174635-58-6/BI OR 174635-59-7
```

/BI OR 174635-60-0/BI OR 174635-61-1/BI OR 174635-69-9/BI OR 174635-71-3/BI OR 174635-73-5/BI OR 174635-91-7/BI OR Searcher: Shears 308-4994

174635-97-3/BI OR 174635-98-4/BI OR 174636-00-1/BI OR 17 4636-01-2/BI OR 174636-04-5/BI OR 174636-06-7/BI OR 17463 6-07-8/BI OR 174636-09-0/BI OR 174636-13-6/BI OR 174636-2 0-5/BI OR 174636-23-8/BI OR 174636-24-9/BI OR 174636-25-0 /BI OR 174636-32-9/BI OR 174636-40-9/BI OR 21611-82-5/BI OR 174635-48-4/BI OR 174635-49-5/BI OR 174635-50-8/BI OR 174635-55-3/BI OR 174635-57-5/BI OR 174635-62-2/BI OR 174 635-63-3/BI OR 174635-64-4/BI OR 174635-65-5/BI OR 174635 -66-6/BI OR 174635-68-8/BI OR 174635-70-2/BI OR 174635-72 -4/BI OR 174635-74-6/BI OR 174635-75-7/BI OR 174635-76-8/ BI OR 174635-77-9/BI OR 174635-78-0/BI OR 174635-79-1/BI OR 174635-80-4/BI OR 174635-81-5/BI OR 174635-82-6/BI OR 174635-83-7/BI OR 174635-84-8/BI OR 174635-85-9/BI OR 174 635-86-0/BI OR 174635-87-1/BI OR 174635-88-2/BI OR 174635 -89-3/BI OR 174635-90-6/BI OR 174635-92-8/BI OR 174635-93 -9/BI OR 174635-94-0/BI OR 174635-95-1/BI OR 174635-96-2/ BI OR 174636-03-4/BI OR 174636-05-6/BI OR 174636-10-3/BI OR 174636-11-4/BI OR 174636-12-5/BI OR 174636-14-7/BI OR 174636-15-8/BI OR 174636-16-9/BI OR 174636-17-0/BI OR 174 636-18-1/BI OR 174636-19-2/BI OR 174636-21-6/BI OR 174636 -22-7/BI OR 174636-26-1/BI OR 174636-27-2/BI OR 174636-28 -3/BI OR 174636-29-4/BI OR 174636-30-7/BI OR 174636-31-8/ BI OR 174636-33-0/BI OR 174636-34-1/BI OR 174636-35-2/BI OR 174636-36-3/BI OR 174636-37-4/BI OR 174636-38-5/BI OR 174636-39-6/BI OR 174636-41-0/BI OR 174636-42-1/BI OR 174 636-43-2/BI OR 174636-44-3/BI OR 174636-45-4/BI OR 174636 -46-5/BI OR 174636-47-6/BI OR 174636-48-7/BI OR 174636-49 -8/BI OR 174636-50-1/BI OR 174636-51-2/BI OR 174636-52-3/ BI OR 174636-53-4/BI OR 174636-54-5/BI OR 174636-55-6/BI OR 174636-56-7/BI OR 174636-57-8/BI OR 174636-58-9/BI OR 174636-59-0/BI OR 174636-60-3/BI OR 174636-61-4/BI OR 174 636-62-5/BI OR 185508-91-2/BI OR 185508-92-3/BI OR 189815 -88-1/BI OR 189815-93-8/BI OR 189815-94-9/BI OR 58865-82-0/BI OR 75204-90-9/BI)

Toughthe graphable

=> d 1,4,6,67,117-120 ide; fil caold

L10 ANSWER 1 OF 120 REGISTRY COPYRIGHT 1997 ACS

RN 189815-94-9 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

FS 3D CONCORD; STEREOSEARCH

MF C26 H22 N2 O4

SR CA

LC STN Files: CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L10 ANSWER 4 OF 120 REGISTRY COPYRIGHT 1997 ACS

RN 185508-92-3 REGISTRY

CN 4-Quinolinecarboxamide, N-(2-isothiocyanato-1,2-diphenylethyl)-6-methoxy-, $[S-(R^*,R^*)]-(9CI)$ (CA INDEX NAME)

FS 3D CONCORD; STEREOSEARCH

MF C26 H21 N3 O2 S

SR CA

LC STN Files: CA, C

CA, CAPLUS

19209

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L10 ANSWER 6 OF 120 REGISTRY COPYRIGHT 1997 ACS

RN 174636-62-5 REGISTRY

CN 4-Quinolinecarboxamide, 3-methoxy-5-methyl-2-phenyl-N-(1-phenylpropyl)-, (S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C27 H26 N2 O2

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

2 hots and

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L10 ANSWER 67 OF 120 REGISTRY COPYRIGHT 1997 ACS

RN 174635-98-4 REGISTRY

CN Benzeneacetic acid, .alpha.-[[[2-(3-thienyl)-4-

quinolinyl]carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C23 H18 N2 O3 S

SR CA

LC STN Files: CA, CAPLUS

3 m/3/ 2007

1 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L10 ANSWER 117 OF 120 REGISTRY COPYRIGHT 1997 ACS

RN **75204-90-9** REGISTRY

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[[[2-(aminocarbonyl)-4-quinolinyl]carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, monopotassium salt, [2S-

[2.alpha., 5.alpha., 6.beta.(S*)]] - (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C27 H25 N5 O6 S . K

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

K

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L10 ANSWER 118 OF 120 REGISTRY COPYRIGHT 1997 ACS

RN **59133-55-0** REGISTRY

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[(acetyloxy)methyl]-7-[[[[(1,2-dihydro-2-oxo-4-quinolinyl)carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-[6.alpha.,7.beta.(R*)]]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C28 H24 N4 O8 S

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

Absolute stereochemistry.

- 3 REFERENCES IN FILE CA (1967 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)
- L10 ANSWER 119 OF 120 REGISTRY COPYRIGHT 1997 ACS
- RN 58865-82-0 REGISTRY
- CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[[(3-ethoxy-4-quinolinyl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, monosodium salt, [2S-(2.alpha.,5.alpha.,6.beta.)]-Searcher: Shears 308-4994

12.t & new L/8

(9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C28 H28 N4 O6 S . Na

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

Na

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L10 ANSWER 120 OF 120 REGISTRY COPYRIGHT 1997 ACS

RN 21611-82-5 REGISTRY

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,

6-[2-(3-ethoxycinchoninamido)-2-phenylacetamido]-3,3-dimethyl-7-oxo-

, D- (8CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C28 H28 N4 O6 S

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

2 h. B See of the Solst

2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

FILE 'CAOLD' ENTERED AT 11:16:29 ON 17 JUN 1997

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 1997 AMERICAN CHEMICAL SOCIETY (ACS) FILE COVERS 1957-1966 FILE LAST UPDATED: 30 OCT 91 (910803/ED) This file contains CAS Registry Numbers for easy and accurate substance identification. NEW TO CAOLD: Searchable and selectable accession numbers, hit-term highlighting, and the HITSTR display format. See NEWS for details. => s 1100 L10 L11 => fil uspat; s 110 FILE 'USPATFULL' ENTERED AT 11:16:41 ON 17 JUN 1997 CA INDEXING COPYRIGHT (C) 1997 AMERICAN CHEMICAL SOCIETY (ACS) FILE COVERS 1971 TO PATENT PUBLICATION DATE: 10 Jun 1997 (19970610/PD) FILE LAST UPDATED: 11 Jun 1997 (970611/ED) HIGHEST PATENT NUMBER: US5638543 CA INDEXING IS CURRENT THROUGH 11 Jun 1997 (970611/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 10 Jun 1997 (19970610/PD) REVISED CLASS FIELDS (/NCL) CURRENT THROUGH: APR 1997 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: FEB 1997 >>> Page images are available for patents from 1/1/94. Current <<< >>> week patent text is typically loaded by Thursday morning and <<< >>> page images are available for display by the end of the day. <<< >>> Image data for the /FA field are available the following week. <<< >>> Complete CA file indexing for chemical patents (or equivalents) <<< >>> is included in file records. A thesaurus is available for the <<< >>> USPTO Manual of Classifications in the /NCL, /INCL, and /RPCL <<< >>> fields. This thesaurus includes catchword terms from the <<< >>> USPTO/MOC subject headings and subheadings. Thesauri are also <<< >>> available for the WIPO International Patent Classification <<< >>> (IPC) Manuals, editions 1-6, in the /IC1, /IC2, /IC3, /IC4, <<< >>> /IC5, and /IC (/IC6) fields, respectively. The thesauri in <<< >>> the /IC5 and /IC fields include the corresponding catchword <<< <<< >>> terms from the IPC subject headings and subheadings.

This file contains CAS Registry Numbers for easy and accurate substance identification.

L12 3 L10

d 1-3 bib abs hitstr; fil marpat

L12 ANSWER 1 OF 3 USPATFULL

AN 81:24739 USPATFULL

TI Cephalosporins having an .alpha.-acylaminoacetic acid side chain

Kocsis, Karoly, Basel, Switzerland

Peter, Heinrich, Binningen, Switzerland

Bickel, Hans, Binningen, Switzerland

PA Ciba-Geigy Corporation, Ardsley, NY, United States (U.S.

corporation)

PI US 4265892 810505

AI US 79-11359 790212 (6)

RLI Division of Ser. No. US 77-789164, filed on 20 Apr 1977, now patented, Pat. No. US 4154831 which is a division of Ser. No. US 75-576398, filed on 9 May 1975, now patented, Pat. No. US 4041161

PRAI CH 74-6494 740513

DT Utility

EXNAM Primary Examiner: Coughlan, Jr., Paul M.

LREP Almaula, Prabodh I. CLMN Number of Claims: 10 ECL Exemplary Claim: 1,7

DRWN No Drawings

LN.CNT 1140

AB

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Compounds of the formula ##STR1## wherein R.sub.1 denotes optionally substituted phenyl, thienyl, furyl or 1,4-cyclohexadienyl, R.sub.2 represents a free carboxyl group or an esterified carboxyl group which can be split physiologically, R.sub.3 represents hydrogen, lower alkoxy or an optionally substituted methyl group and B represents an optionally substituted six-membered ring with 1 to 3 ring nitrogen atoms, which is bonded to the carbonyl group --C(.dbd.0)-- by one of its carbon atoms, the nitrogen atoms of a monocyclic six-membered ring having 2 nitrogen atoms being either adjacent or separated by two ring carbon atoms, and the salts of such compounds which have a salt-forming group, including the inner salts, for example the 7.beta.-[D(-)-.alpha.-(3,5-Dioxo-2,3,4,5-tetrahydro-1,2,4-triazine-6-carboxamido)-phenylacetamido]-cephalosporanic acid, have antibiotic activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 59133-55-0P

(prepn. of)

RN 59133-55-0 USPATFULL

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[(acetyloxy)methyl]-7-[[[(1,2-dihydro-2-oxo-4-quinolinyl)carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-[6.alpha.,7.beta.(R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

```
ΑN
       79:24260 USPATFULL
TI
       Cephalosporins having an .alpha.-acylaminoacetic acid side chain
       Kocsis, Karoly, Basel, Switzerland
IN
       Peter, Heinrich, Binningen, Switzerland
       Bickel, Hans, Binningen, Switzerland
       Ciba-Geigy Corporation, Ardsley, NY, United States (U.S.
PA
       corporation)
       US 4154831 790515
ΡI
       US 77-789164 770420 (5)
ΑI
       Division of Ser. No. US 75-576398, filed on 9 May 1975, now
RLI
       patented, Pat. No. US 4041161
PRAI
       CH 74-6494 740513
DT
       Utility
      Primary Examiner: Daus, Donald G.; Assistant Examiner: Wheeler,
EXNAM
       David E.
       Maitner, John J.
LREP
       Number of Claims: 8
CLMN
       Exemplary Claim: 1,4
ECL
DRWN
      No Drawings
LN.CNT 1119
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Compounds of the formula ##STR1## wherein R.sub.1 denotes
AB
       optionally substituted phenyl, thienyl, furyl or
       1,4-cyclohexadienyl, R.sub.2 represents a free carboxyl group or
       an esterified carboxyl group which can be split physiologically,
       R.sub.3 represents hydrogen, lower alkoxy or an optionally
       substituted methyl group and B represents an optionally
       substituted six-membered ring with 1 to 3 ring nitrogen atoms,
       which is bonded to the carbonyl group --C(.dbd.O)-- by one of its
       carbon atoms, the nitrogen atoms of a monocyclic six-membered ring
       having 2 nitrogen atoms being either adjacent or separated by two
       ring carbon atoms, and the salts of such compounds which have a
       salt-forming group, including the inner salts, for example the
       7.beta.-[D(-)-.alpha.-(3,5-Dioxo-2,3,4,5-tetrahydro-1,2,4-triazine-
       6-carboxamido)-phenylacetamido]-cephalosporanic acid, have
       antibiotic activity.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 59133-55-0P
        (prepn. of)
RN
     59133-55-0 USPATFULL
     5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
CN
       3-[(acetyloxy)methyl]-7-[[[[(1,2-dihydro-2-oxo-4-
       quinolinyl)carbonyl]amino]phenylacetyl]amino]-8-oxo-,
       [6R-[6.alpha., 7.beta.(R*)]]- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

```
ANSWER 3 OF 3 USPATFULL
L12
       77:41963 USPATFULL
ΑN
       Cephalosporins having an .alpha.-acylaminoacetic acid side chain
TI
       Kocsis, Karoly, Basel, Switzerland
IN
       Peter, Heinrich, Binningen, Switzerland
       Bickel, Hans, Binningen, Switzerland
       Ciba-Geigy Corporation, Ardsley, NY, United States (U.S.
PA
      corporation)
                   770809
PΙ
      US 4041161
      US 75-576398 750509 (5)
AΤ
PRAI
      CH 74-6494 740513
DT
      Utility
EXNAM
      Primary Examiner: Rizzo, Nicholas S.; Assistant Examiner: Wheeler,
      David E.
      Kolodny, Joseph G.; Maitner, John J.; Groeger, Theodore O.
LREP
CLMN
      Number of Claims: 6
ECL
      Exemplary Claim: 1,5
DRWN
      No Drawings
LN.CNT 1095
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       Compounds of the formula ##STR1## wherein R.sub.1 denotes
       optionally substituted phenyl, thienyl, furyl or
       1,4-cyclohexadienyl, R.sub.2 represents a free carboxyl group or
       an esterified carboxyl group which can be split physiologically,
      R.sub.3 represents hydrogen, lower akoxy or an optionally
       substituted methyl group and B represents an optionally
       substituted six-membered ring with 1 to 3 ring nitrogen atoms,
      which is bonded to the carbonyl group -- C(.dbd.0) -- by one of its
      carbon atoms, the nitorgen atoms of a monocyclic six-membered ring
      having 2 nitrogen atoms being either adjacent or separated by two
       ring carbon atoms, and the salts of such compounds which have a
       salt-forming group, including the inner salts, for example the
       7.beta.-[D(-)-.alpha.-(3,5-Dioxo-2,3,4,5-tetrahydro-1,2,4-triazine-
       6-carboxamido)-phenylacetamido]-cephalosporanic acid, have
       antibiotic activity.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT
   59133-55-0P
        (prepn. of)
     59133-55-0 USPATFULL
RN
CN
     5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
       3-[(acetyloxy)methyl]-7-[[[[(1,2-dihydro-2-oxo-4-
```